

April **DRAFT**, 2005

Mr. Sean S. Heaney, Director
Technical Support Department
Commander, Navy Region, Mid-Atlantic
1510 Gilbert Street
Norfolk, Virginia 23511-2737

Location: Yorktown
Registration No.: 60301
AFS Id. No.: 51-199-00002

Dear Sir or Madam:

Attached is an amended permit to operate Naval Weapons Station Yorktown in accordance with the provisions of the Commonwealth of Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. This permit supersedes and incorporates the permits dated August 16, 1993, November 23, 1993, May 13, 1994, April 11, 1995, September 29, 1995, July 18, 1997, February 25, 1999, March 31, 2000, September 7, 2000 and May 6, 2002, as amended September 19, 2002, July 7, 2003 and January 30, 2004.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on October 29, 2004 and solicited written public comments by placing a newspaper advertisement in the Virginian-Pilot on Sunday, March 6, 2005. The required comment period, provided by 9 VAC 5-80-1020 A expired on Tuesday, April 5, 2005.

This approval to operate shall not relieve Naval Weapons Station Yorktown of the responsibility to comply with all other local, state and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board

within 30 days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-180 provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Robert G. Burnley, Director
Department of Environmental Quality
Post Office Box 10009
Richmond, Virginia 23240-0009

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part 2A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please call Stephen A. Hackney at (757) 518-2124.

Sincerely,

Harold J. Wner
Deputy Regional Director

HJW SAH/ NWS Yorktown-2005-SOP.doc

Attachments: Permit

cc: Director, OAPP (electronic file submission)
Manager, Office of Data Analysis (electronic file submission)
Chief, Permits and Technical Assessment Branch (3AP11), U.S. EPA,
Region III

STATIONARY SOURCE PERMIT TO OPERATE

This permit includes designated equipment subject to
New Source Performance Standards (NSPS)

This permit supersedes and incorporates the permits dated August 16,
1993,
November 23, 1993, May 13, 1994, April 11, 1995, September 29, 1995,
July 18, 1997,
February 25, 1999, March 31, 2000, September 7, 2000 and May 6, 2002.

In compliance with the Federal Clean Air Act and the Commonwealth
of Virginia Regulations for the Control and Abatement of Air Pollution,

Commander, Navy Region, M d-Atlantic
Environmental Department (Code N457)
1510 Gilbert Street
Norfolk, Virginia 23511-2737
AFS Id. No.: 51-199-00002
Registration No.: 60301

is authorized to operate a

Naval Weapons Station

located at

Naval Weapons Station Yorktown
Yorktown, Virginia

in accordance with the conditions of this permit.

Approved on April DRAFT, 2005.

----- (for)
Director, Department of Environmental Quality

Permit consists of 15 pages.
Permit conditions 1 to 55.

PERMIT CONDITIONS - the regulatory reference and authority for the condition is listed in parentheses () after each condition.

1. Except as specified in this permit, the permitted facility is to be operated as represented in the permit applications dated May 13, 1993, June 4, 1993, October 8, 1993, May 26, 1994, March 31, 1995, October 18, 1996, June 25, 2001 and October 29, 2004, including amendment sheets dated July 16, 1993, August 6, 1993, July 30, 1993, September 8, 1993, December 3, 1993, January 26, 1994, March 11, 1994, April 15, 1994, June 3, 1994, December 6, 1994, January 6, 1995, January 11, 1995, September 18, 1995, April 7, 1995, November 18, 1996, November 20, 1996, November 19, 1996, November 25, 1996, December 3, 1996, December 11, 1996, December 18, 1996, February 26, 1997, March 7, 1997, April 16, 1997, May 7, 1997, January 13, 1999, November 12, 1999, June 7, 2000, July 5, 2001, October 9, 2001, December 5, 2001, March 5, 2002, June 18, 2003, July 3, 2003, November 25, 2003 and January 10, 2005. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. (9 VAC 5-80-830 of State Regulations)
2. Equipment consists of:
 - Abrasive Blasting**
 - Two (2) aluminum oxide/plastic media blasting booths each rated at 1400 lb/hr with a dust collector (Ref. Nos. 3-001 and 3-002)
 - Boilers not subject to NSPS, Subpart Dc**
 - **Group I (deleted)**
 - **Group II (deleted)**
 - **Group III**
 - Three (3) number 4 fuel oil/natural gas boilers, each rated at 6.28 million BTU/hr hour (Ref Nos. 457-005, 457-006, and 457-007)
 - Three (3) number 4 fuel oil/natural gas boilers, each rated at 10.46 million BTU/hr hour (Ref Nos. 708-001, 708-002, and 708-003)
 - **Group IV**
 - One (1) distillate oil boiler, rated at 1.88 million BTU/hr (Ref. No. 28-002)
 - One (1) distillate oil boiler, rated at 2.13 million BTU/hr (Ref. No. 2020-001)
 - One (1) distillate oil boiler, rated at 1.00 million BTU/hr (Ref. No. 2020-002)
 - One (1) distillate oil boiler, rated at 1.50 million BTU/hr (Ref. No. 58-001)
 - One (1) distillate oil boiler, rated at 0.39 million BTU/hr (Ref. No. 374-001)
 - One (1) distillate oil boiler, rated at 0.16 million BTU/hr

- (Ref. No. 480-001)
- One (1) distillate oil boiler, rated at 0.40 million BTU/hr (Ref. No. 1246-001)
- One (1) distillate oil boiler, rated at 0.20 million BTU/hr (Ref. No. 1992-001)

Group V

- One (1) distillate oil/natural gas boiler, rated at 8.37 million BTU/hr (Ref. No. 8-003)
- One (1) distillate oil/natural gas boiler, rated at 15.69 million BTU/hr (Ref. No. 93-001)
- One (1) distillate oil/natural gas boiler, rated at 6.83 million BTU/hr (Ref. No. 466-001)
- One (1) distillate oil/natural gas boiler, rated at 0.84 million BTU/hr (Ref. No. 717-001)
- One (1) distillate oil/natural gas boiler, rated at 1.05 million BTU/hr (Ref. No. 1348-001)
- One (1) distillate oil/natural gas boiler, rated at 1.72 million BTU/hr (Ref. No. 721-001)
- Two (2) distillate oil/natural gas boilers, each rated at 2.51 million BTU/hr (Ref. Nos. 787-001 and 787-002)
- One (1) distillate oil/natural gas boiler, rated at 1.63 million BTU/hr (Ref. No. 1347-001)
- One (1) distillate oil/natural gas boiler, rated at 7.16 million BTU/hr (Ref. No. 1350-001)
- One (1) distillate oil/natural gas boiler, rated at 2.64 million BTU/hr (Ref. No. 1456-001)
- One (1) distillate oil/natural gas boiler, rated at 1.67 million BTU/hr (Ref. No. 1459-001)
- One (1) distillate oil/natural gas boiler, rated at 3.18 million BTU/hr (Ref. No. 1794-001)
- One (1) distillate oil/natural gas boiler, rated at 1.21 million BTU/hr (Ref. No. 1794-002)
- One (1) distillate oil/natural gas boiler, rated at 1.51 million BTU/hr (Ref. No. 1806-001)

- One (1) distillate oil/natural gas boiler, rated at 5.23 million BTU/hr (Ref. No. 1816-001)
- One (1) distillate oil/natural gas boiler, rated at 3.35 million BTU/hr (Ref. No. 1816-003)
- One (1) distillate oil/natural gas boiler, rated at 1.67 million BTU/hr (Ref. No. 1828-002)
- One (1) distillate oil/natural gas boiler, rated at 0.60 million BTU/hr (Ref. No. 1868-001)
- One (1) distillate oil/natural gas boiler, rated at 0.75 million BTU/hr (Ref. No. 1959-001)
- One (1) distillate oil/natural gas boiler, rated at 2.65 million BTU/hr (Ref. No. 1959-002)
- One (1) distillate oil/natural gas boiler, rated at 0.40 million BTU/hr (Ref. No. 1976-001)
- Two (2) distillate oil/natural gas boilers, each rated at 2.38 million BTU/hr (Ref. Nos. 1990-001 and 2006-001)
- One (1) distillate oil/natural gas boiler, rated at 1.00 million BTU/hr (Ref. No. 2006-002)
- One (1) distillate oil/natural gas boiler, rated at 2.94 million BTU/hr (Ref. No. 1833-001)
- One (1) distillate oil/natural gas boiler, rated at 5.23 million BTU/hr (Ref. No. 1834-001)
- Distillate oil/natural gas housing units, each rated at less than 1 million BTU/hr
(total combined rated capacity of 53.2 million BTU/hr)

Group VI

- One (1) distillate oil/natural gas boiler, rated at 10.46 million BTU/hr (Ref. No. 431-001)
- One (1) distillate oil/natural gas boiler, rated at 2.09 million BTU/hr (Ref. No. 1595-004)

Boilers subject to NSPS, Subpart Dc

Group VII (deleted)

Group VIII

- Two (2) distillate oil/natural gas boilers, each rated at 10.46 million BTU/hr (Ref. Nos. 476-004 and 476-005)

Degreasers and Paint Gun Washers

- Ten (10) cold degreaser dip tanks (Ref. Nos. 3-001, 350-001, 372-001, 529-001, 683-001, 710-001, 1479-002, 1816-001, 1816-002, 1816-004, and one (1) paint gun washer (Ref. Nos. 1479-001)

Generators and other Internal Combustion Engines

Group I

- Twenty-nine (29) diesel emergency generators with a total rated capacity of 6218 kW or 43.3 million BTU/hr

(Ref. Nos. installed before March 17, 1972: 703-001, 1231-001, 1806-001, 1810-001, 1830-001, 1860-001, 1861-001, 1862-001, 1863-001, 1864-001, 1865-001, 1893-001, 1894-001, 1896-001, 1958-001, 715-001, 715-002, 1595-001, 1831-001, 497-001, 1808-001, 461-001 and 2020-001)

(Ref. Nos. installed after March 17, 1972: 381-001, 702-002, 1816-001, 1990-001, 2021-001)

(Ref. Nos. installed after March 17, 1972: One (1) diesel peak shaving generator with a rated capacity of 1600 kW or 17.0 million BTU/hr (Ref. No. 1372-001))

Group II

- Two (2) gasoline emergency generators with a total rated capacity of 5.7 kW or 0.02 million BTU/hr

(Ref. Nos. Installed before March 17, 1972: 645-001 and 1367-001)

Spray Painting

- Two (2) paint spray booths (Ref. Nos. 3-002 (bldg. 3), and 1479-001 (bldg. 1479) each with dry filters.
- Six (6) aerosol paint booths (Ref. Nos. 476-001, 476-003a, 476-003b, 476-007, 476-008 and 1816-001 each with dry filters.

Storage Tanks

- Three (3) aboveground gas storage tanks with a total storage capacity of 10,800 gallons (Ref. No. GAS-AST-001)
- Two (2) underground gas storage tanks with a total storage capacity of 27,000 gallons (Ref. No. GAS-UST-001)
- Eight (8) (each tank \geq 1000 gallons) aboveground distillate oil storage tanks with a total storage capacity of 33,000 gallons (Ref. No. DO-AST-001)
- Thirty-two (32) small (each tank $<$ 1000 gallons) aboveground distillate oil storage tanks with a total storage capacity of 9875 gallons (Ref. No. DO-AST-002)
- Forty (40) underground distillate oil storage tanks with a total storage capacity of 115,050 gallons (Ref. No. DO-UST-001)
- Two (2) underground fuel oil no. 4 storage tanks with a total storage capacity of 45,000 gallons (Ref. No. FO4-001)

Woodworking

- Six (6) woodworking shops (Ref. Nos. 1-001, 93-001, 480-001, 688-001, 710-001 and 2020-001) with six (6) dust collectors

Firing Range

- One (1) outdoor firing range rated at 100 rounds per hour, including two (2) gasoline fired engines (9 HP generator and 10 HP compressor)

3. **Emission Controls** - Particulate emissions from each abrasive-blasting booth (Ref. Nos. 3-001 and 3-002) shall be controlled by a dust collector. Each dust collector shall be provided with adequate access for inspection. Each dust collector shall be equipped with a device to continuously measure the differential pressure drop across the filters. The devices shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC-5-80-850 of State Regulations)

4. Nitrogen oxide emissions from the diesel peak shaving generator (Ref. No. 1372-001) shall be controlled by retarding the fuel injection timing by four (4) degrees from standard timing.
(9 VAC 5-170-160 of State Regulations)

5. Particulate emissions from the paint spray booths (Ref. Nos. 3-002, 1479-001, 476-001, 476-003a, 476-003b, 476-007, 476-008 and 1816-001) shall be controlled by dry filters. The dry filters shall be provided with adequate access for inspection.
(9 VAC 5-80-850 of State Regulations)
6. Volatile Organic Compound emissions from cold degreasers and paint gun cleaners shall be controlled as specified in 9 VAC 5-40-3280, to include the following, as a minimum
 - a. Degreaser covers shall be kept closed when not in use; and,
 - b. Cleaned parts shall drain for at least 15 seconds before removal.
(9 VAC 5-40-3280 of State Regulations)
7. Volatile organic compound emissions from the two (2) underground 12,000 and 15,000 gallon fixed roof gasoline storage tanks (Ref. No. GAS-UST-001) and the one (1) 10,000-gallon biogasoline tank (Ref. No. GAS-AST-001) shall be equipped with a Stage I vapor control system for the transfer of gasoline from any tank truck into the storage tanks starting January 1, 1999. The vapor control system must remove, destroy, or prevent the discharge into the atmosphere of at least 90% by weight of volatile organic compound emissions.
(9 VAC 5-40-5200 B of State Regulations)
8. Particulate emissions from the woodworking shops (Ref. Nos. 1-001, 93-001, 480-001, 688-001, 710-001 and 2020-001) shall be controlled by dust collectors. Each dust collector shall be provided with adequate access for inspection.
(9 VAC 5-80-850 of State Regulations)
9. The annual throughput of aluminum oxide/plastic blasting media shall not exceed 10 tons per year for Ref Nos. 3-001 and 3-002 combined, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
10. The boilers in Group III of Condition 2 shall consume no more than 610,600 gallons of number 4 fuel oil, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
11. The boilers in Group III, V, VI, and VIII of Condition 2 shall consume no more than 513 million cubic feet of natural gas, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
12. The boilers in Group IV, V, VI, and VIII of Condition 2 shall

consume no more than 1,079,500 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)

13. The annual throughput of solvent used for the cold degreasers (Ref. Nos. 3-001, 350-001, 372-001, 529-001, 683-001, 710-001, 1816-001, 1816-002, 1816-004), and paint gun washers (Ref. Nos. 1479-001 and 1479-002) shall not exceed 15,571 gallons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
14. The generators in Group I of Condition 2 shall consume no more than 165,870 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
15. The generators in Group II of Condition 2 shall consume no more than 6,249 gallons of gasoline per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
16. The annual throughput of aerosol cans (Ref. No. AER-001) for spray painting shall not exceed 17,000 cans (2125 gallons per year), calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
17. The annual throughput of coatings in the paint booths for buildings 3 (Ref. No. 3-002) and 1479 (Ref. No. 1479-001) shall not exceed 2,314 gallons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
18. The annual throughput of gasoline for the two (2) underground gasoline storage tanks (Ref. No. GAS-UST-001) shall not exceed 1,500,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
19. The annual throughput of gasoline for the three (3) aboveground gasoline storage tanks (Ref. No. GAS-AST-001) shall not exceed 200,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
20. The annual throughput of fuel oil no. 4 for the two (2) underground storage tanks storing fuel oil no. 4 (Ref. No. FO4-UST-001) shall not exceed 1,560,000 gallons per year, calculated monthly as the sum

of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)

21. The annual throughput of distillate oil for the forty (40) underground distillate oil storage tanks (Ref. No. DO-UST-001) shall not exceed 1,800,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
22. The annual throughput of distillate oil for the forty (40) aboveground distillate oil storage tanks (Ref. No. DO-AST-001 and DO-AST-002) shall not exceed 1,250,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-170-160 of State Regulations)
23. Except as specified in this permit, the boilers with Ref Nos. 476-004 and 476-005 are to be operated in compliance with Federal emissions requirements under 40 CFR 60, Subpart Dc.
(9 VAC 5-170-160 of State Regulations)
24. The approved fuel for the boilers in Group III of Condition 2 is number 4 fuel oil and/or natural gas. Number 4 fuel oil is defined as fuel oil that meets the specifications for number 4 fuel oil under the American Society for Testing and Materials, ASTM "Standard Specification for Fuel Oils". A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-850 of State Regulations)
25. The approved fuel for the boilers in Group IV of Condition 2 is distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM "Standard Specification for Fuel Oils". A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-850 of State Regulations)
26. The approved fuel for the boilers in Group V and Group VI of Condition 2 is distillate oil and/or natural gas. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM "Standard Specification for Fuel Oils". A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-850 of State Regulations)
27. The approved fuel for the boilers in Group VIII of Condition 2 is distillate oil and/or natural gas. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2

under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils". A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-850 of State Regulations)

28. The approved fuel for the Group I generators in Condition 2 is distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM "Standard Specification for Fuel Oils". A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850 of State Regulations)
29. The approved fuel for the generators in Group II of Condition 2 is gasoline. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850 of State Regulations)
30. Emissions from the operation of all abrasive blasting booths combined shall not exceed the limits specified below:

tons/yr	Particulate	8.9 lbs/hr	1.2
	PM 10	8.9 lbs/hr	1.2
	tons/yr		

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 3 and 9.
(9 VAC 5-80-850 of State Regulations)

31. Emissions from the operation of all boilers combined shall not exceed the limits specified below:

Particulate	8.8 lbs/hr	4.8
tons/yr		
PM 10	8.8 lbs/hr	4.8
tons/yr		
Sulfur Dioxide	200.9 lbs/hr	84.3
tons/yr		
Nitrogen Oxides (as NO ₂)	73.4 lbs/hr	52.8
tons/yr		
Carbon Monoxide	18.4 lbs/hr	13.2
tons/yr		
Volatile Organic Compounds	1.0 lbs/hr	
0.9 tons/yr		

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 10, 11 and 12.
 (9 VAC 5-80-850 of State Regulations)

32. Emissions from the operation of all degreasers combined shall not exceed the limits specified below:

Volatile Organic Compounds	14.2 lbs/hr	14.8
tons/yr		

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number 13.
 (9 VAC 5-80-850 of State Regulations)

33. Emissions from the operation of all generators combined shall not exceed the limits specified below:

Total Suspended Particulate	19.0 lbs/hr	3.0
tons/yr		
PM 10	19.0 lbs/hr	3.0
tons/yr		

Sulfur Dioxide tons/yr	38.4 lbs/hr	6.2
Nitrogen Oxides (as NO ₂) tons/yr	228.7 lbs/hr	37.2
Carbon Monoxide tons/yr	178.7 lbs/hr	21.9
Volatile Organic Compounds tons/yr	16.9 lbs/hr	2.7

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 4, 14 and 15.
 (9 VAC 5-80-850)

34. Emissions from all spray painting operations combined shall not exceed the limits specified below:

Total Suspended Particulate 13.6 tons/yr	5.9 lbs/hr	
PM 10 tons/yr	5.9 lbs/hr	13.6
Volatile Organic Compounds	3.6 lbs/hr	15.3 tons/yr
Toluene	1.8 lbs/hr	5.9 tons/yr
Methyl Ethyl Ketone tons/yr	2.4 lbs/hr	5.4
Methyl Isobutyl Ketone tons/yr	0.6 lbs/hr	1.3
Xylene tons/yr	0.3 lbs/hr	1.0
Ethyl Benzene tons/yr	1.6 lbs/hr	3.7
Hexamethylene Diisocyanate 0.04 tons/yr	0.02 lbs/hr	

Dibutyl Phthlate	0.1 lbs/hr	0.3
tons/yr		
Hazardous Air Pollutants	Total:	
17.6 tons/yr		
	Max. Individual HAP	5.9 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 5, 16 and 17.
 (9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

35. Emissions from the operation of the underground and aboveground storage tanks combined shall not exceed the limits specified below:

Volatile Organic Compounds	5.0 lbs/hr	10.9
tons/yr		

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 7, 18, 19, 20, 21 and 22.
 (9 VAC 5-80-850 of State Regulations)

36. Emissions from the operation of all woodworking shops combined shall not exceed the limits specified below:

Total Suspended Particulate	7.1 lbs/hr	
31.0 tons/yr		
PM 10	2.3 lbs/hr	10.1
tons/yr		

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number 8.
 (9 VAC 5-80-850 of State Regulations)

37. Emissions from the operation of the facility shall not exceed the limits specified below:

Total Suspended Particulate	49.7 lbs/hr	
53.6 tons/yr		
PM 10	44.9 lbs/hr	32.7
tons/yr		
Sulfur dioxide	239.3 lbs/hr	90.5
tons/yr		
Nitrogen oxides (as NO ₂)	302.1 lbs/hr	90.0
tons/yr		
Carbon monoxide	197.0 lbs/hr	35.1
tons/yr		
Volatile Organic Compounds	40.9 lbs/hr	
44.6 tons/yr		
Toluene	1.8 lbs/hr	5.9
tons/yr		
Methyl ethyl ketone	2.4 lbs/hr	
5.4 tons/yr		
Methyl isobutyl ketone	0.6 lbs/hr	
1.3 tons/yr		
Xylene	0.3 lbs/hr	
1.0 tons/yr		
Ethyl Benzene	1.6 lbs/hr	
3.7 tons/yr		
Hexamethylene diisocyanate	0.02 lbs/hr	
0.04 tons/yr		
Dibutyl phthalate	0.1 lbs/hr	
0.3 tons/yr		
Hazardous Air Pollutants:	Total HAPs:	17.6 tons/yr
Maximum Individual HAP		5.9 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 30, 31, 32, 33, 34, 35 and 36.
(9 VAC 5-50-260 and 9 VAC 5-50-180 of State Regulations)

38. Visible emissions from each dust collector exhaust for each abrasive blasting booth exhaust shall not exceed five (5) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-260 and 9 VAC 5-50-20 of State Regulations)
39. Visible emissions from each boiler stack in Group VI of Condition 2 shall not exceed twenty (20) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed sixty (60) percent opacity. This condition applies at all times except during start-up, shutdown, or malfunction.
(9 VAC 5-40-20 and 9 VAC 5-40-940 of State Regulations)

40. Visible emissions from each boiler stack in Group III, IV, and V of Condition 2 shall not exceed twenty (20) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (30) percent opacity. This condition applies at all times except during start-up, shutdown, or malfunction.
(9 VAC 5-50-20 and 9 VAC 5-50-80 of State Regulations)
41. Visible emissions from each boiler stack in Group VIII of Condition 2 shall not exceed ten (10) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity. This condition applies at all times except during start-up, shutdown, or malfunction.
(9 VAC 5-50-20 and 9 VAC 5-50-260 of State Regulations)
42. Visible emissions from each generator that was installed before March 17, 1972 in Condition 2 shall not exceed twenty (20) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed sixty (60) percent opacity. Visible emissions from each generator that was installed after March 17, 1972 in Condition 2 shall not exceed twenty (20) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (30) percent opacity. This condition applies at all times except during start-up, shutdown, or malfunction.
(9 VAC 5-50-20 and 9 VAC 5-50-80 of State Regulations)
43. Visible emissions from each spray booth exhaust shall not exceed five (5) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-260 and 9 VAC 5-50-20 of State Regulations)
44. Visible emissions from each wood working dust collector shall not exceed five (5) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-260 and 9 VAC 5-50-20 of State Regulations)
45. The maximum sulfur content of the number 4 fuel oil to be burned by the boilers in Group III of Condition 2 shall not exceed 1.0 percent by weight per shipment. The permittee shall obtain a certification from the fuel supplier, including sampling and analysis representative of each shipment of number 4 fuel oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier,
- b. The date on which the number 4 fuel oil was received,
- c. The volume of the number 4 fuel oil delivered in the shipment,
- d. The sulfur content of the number 4 fuel oil,
- e. Documentation of sampling of the number 4 fuel oil indicating the location of the oil when the sample was drawn, and
- f. The method used to determine the sulfur content of the number 4 fuel oil.

(9 VAC 5-80-850 of State Regulations)

46. The maximum sulfur content of the distillate oil to be burned by the boilers in Groups IV, V, VI and VIII of Condition 2, and generators in Group I, shall not exceed 0.5 percent by weight per shipment. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier,
 - b. The date on which the distillate oil was received,
 - c. The volume of distillate oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
 - e. A statement that the sulfur content of the distillate oil does not exceed 0.5% by weight.

(9 VAC 5-80-850 of State Regulations)

47. Boiler and generator emissions shall be controlled by proper operation and maintenance. Boiler and generator operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers and generators. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by DEQ.

(9 VAC 5-80-850 of State Regulations)

48. The permittee shall submit fuel quality reports for the NSPS Dc boilers (Ref. Nos. 476-004, 476-005) to the Director, Tidewater Region within 30 days after the end of each semi-annual period. If no shipments of distillate oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no oil was received during the semi-annual period. If distillate oil was received during the semi-annual period the reports shall include:
- a. The dates included in the semi-annual period,
 - b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in Condition 46 for each shipment of distillate oil, and
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or

summaries of fuel supplier certifications represent all of the distillate oil burned by or received for the NSPS Dc boilers.

One copy of the semi-annual report shall be submitted to the U. S. Environmental Protection Agency at the following address:

Chief Air Enforcement Branch
U. S. Environmental Protection Agency (3AP12)
ATTN: Dc Coordinator
Region III
1650 Arch Street
Philadelphia, PA 19103

(9 VAC 5-170-160 and 9 VAC 5-50-50 of State Regulations)

49. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Tidewater Region. These records shall include, but are not limited to:

- a. The monthly and annual throughput for each abrasive blasting media (in tons) used in the aluminum oxide/plastic media blasting booths (Ref. Nos. 3-001 and 3-002),
- b. The monthly throughput of distillate oil and natural gas for the NSPS Dc boilers (Ref. Nos. 476-004, and 476-005),
- c. The monthly and annual throughput of natural gas, distillate oil, and number 4 fuel oil for all the boilers,
- d. The monthly and annual throughput of all solvent used in the cold degreaser dip tanks and paint gun washers,
- e. The monthly and annual throughput of diesel and gasoline for the generators,
- f. All fuel supplier certifications,
- g. The monthly and annual throughput of paint from aerosol spray cans (in gallons),
- h. The monthly and annual throughput (in gallons) of coatings at each spray paint booth,
- i. Current MSDS for each coating and solvent used in each spray paint booth and each type of aerosol spray can, indicating the VOC and individual HAP content in percent by weight,
- j. The annual throughputs of gasoline, number 4 fuel oil, and distillate oil for the underground gasoline storage tanks, aboveground gasoline storage tanks, underground fuel no. 4 storage tanks, underground distillate oil storage tanks, and aboveground distillate oil storage tanks,
- k. The annual observations of gasoline delivery with Stage 1 Vapor Recovery System in operation.

These records shall be available on site for inspection by DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-900 of State Regulations)

50. This permit may be modified or revoked in whole or in part for cause, including, but not limited to, any of the following actions by the permittee:

- a. Willfully making material misstatements in the permit application or any amendments thereto;
- b. Failing to comply with the terms or conditions of the permit;
- c. Failing to comply with any emission standards applicable

- to an emissions unit included in the permit;
 - d. Causing emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time that an application is submitted; or
 - e. Failing to comply with the applicable provisions of 9 VAC 5-80-10, 9 VAC 5-80-20 and 9 VAC 5-80-30.
- (9 VAC 5-80-850 of State Regulations)

51. The permittee shall allow authorized local, state and federal representatives, upon the presentation of credentials:
- To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
 - To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
 - To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
 - To sample or test at reasonable times.
- For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9 VAC 5-170-130 of State Regulations)
52. If, for any reason, the permitted facility or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner or operator shall notify the Tidewater Regional Office within four (4) business hours of the occurrence. In addition, the owner shall provide a written statement, within fourteen (14) days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shut down.
(9 VAC 5-20-180 of State Regulations)
53. In the event of any change in control of ownership of the permitted source, the permittee shall notify the succeeding owner of the existence of this permit by letter and send a copy of that letter to the Tidewater Regional Office.
(9 VAC 5-80-940 of State Regulations)
54. Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate your prompt response to requests for information to include, as appropriate: process and production data; changes in control equipment, and operating schedules. Such requests for information from DEQ will either be in writing or by personal contact. The availability of information submitted to DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board), and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to

federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.
(9 VAC 5-80-900 of State Regulations)

55. A copy of this permit shall be maintained on the premises of the facility to which it applies.
(9 VAC 5-80-860 of State Regulations)

PERMIT CHECK LIST

The following people have reviewed the permit:

Reviewing Environmental Engineer: _____

Environmental Inspector: _____

Environmental Compliance Manager: _____

Date: March 8, 2005

Source Name: Naval Weapons Station Yorktown Registration No: 60301

I.D. No.: 51-199-00002

Source Location: Yorktown, Virginia

Mail Address: Post Office Drawer 160, Yorktown, Virginia 23691-0160

Source Status: _____ Greenfield v Currently operating

Source Classification: _____ Mnor v SynMnor _____ PSD Major
_____ TV Major

Permit Action: Naval Weapons Station Yorktown (NWSY) has requested several changes to their permit to reflect changes in some fuel storage tanks and increased gasoline throughputs. The changes will require a complete significant amendment to the Operating Permit for the Naval Weapons Station - Yorktown.

Permit Action Type:

_____ Mnor _____ State Major _____ PSD _____ NA v SOP _____ TV
_____ New _____ Modification _____ Mnor Amendment v

Significant Amendment

Y (Y/N) Permit Includes All Emission Units at Source.

Y (Y/N) Permit Allows Source to avoid Title V/ MACT/etc.

After this permit, source is: _____ Major (A) _____ Mnor (B) v

Synthetic minor (SM)

(SO2 Pollutant, NOx Pollutant, HAPs

Pollutant)

Permit Application Review

v Permit application submitted, or _____ Letter Request.

Application Received Date October 29, 2004.

Application Complete Date January 10, 2005 (new emission factor info - email from Brian).

Deadline Date April 9, 2005.

v Document Certification Form received.

N Confidential information with sanitized copy. If yes, which sections:

_____ throughputs _____ individual pollutants _____ flow diagrams _____ calculations

_____ process descriptions _____ other (describe)

NA Copy of letter from local official for greenfield, or major

modified sources

NA Copy of letter sent to FLM if applicable. (Comments)

This permit supersedes permit dated May 6, 2002.

Regulatory Review

BACT Determination (check one):

v Stage I controls (90%) for the control of VOC (gasoline) meets BACT,

TV/SOP or Amendment - BACT not applicable.

Y (Y/N) NSPS/ MACT/ NESHAPS Applicability: If Y, Subpart(s): not to this permit action.

DC NSPS - applicable to a few boilers on the base.

MACT (if yes, an engineering write-up & public hearing are necessary)

NESHAPS (if yes, an engineering write-up & public hearing are necessary)

Y (Y/N) Existing Rules (9 VAC 5 Chapter 40) Applicability: If Y, Rule(s): Rule 4-24 (Cold Cleaners).

Regulatory Review (cont.)

Toxic Pollutants (check one):

Exempt, or v in compliance with 9 VAC 5-50-220, or not evaluated

Modeling (check one):

Attached, or

v No modeling required by agency policy (< modeling significance levels, etc.)

Site Suitability:

v Site suitable from an air pollution standpoint, inspection date 9/9/04, or no inspection required.

v Calculation sheet(s) attached: _____.

N (Y/N) NSR Netting Comments (Explain Permit History):

Permit includes: _____ Stack Testing _____ CEM _____ VEE by source

Public Participation

Y (Y/N) Public Noticed. If yes, Public Notice Date: need PN for sig. amendment.

(Y/N) Public Notice Comments. If yes, number and nature of comments:

_____(Y/ N) Public Hearing: If yes, Public Hearing Date:

EPA Review

____ N (Y/ N) EPA Review. If yes, date proposed permit sent to EPA

____ N (Y/ N) EPA Comments. If yes, give a brief summary

Other Comments and Final Recommendations (attach memo or list below):

Comments: Naval Weapons Station Yorktown (NWSY) has requested several changes to their SOP permit to reflect recent changes to some tanks and increased gasoline throughput. The gasoline station will be opened up to private vehicle fueling after the changes and so the throughput of gasoline will increase significantly. The changes include replacing two underground storage tanks with capacities of 15,000 gallons each with one of 15,000 gallons and another with a capacity of 12,000 gallons. Requested throughput for the GAS-UST-001 tanks will be 1,500,000 gallons per year. An above ground gasoline storage tank will also be added to provide Biogas to the facility customers. The BioGas-AST-001 tank will have 10,000 gallon capacity and the throughput for all of the above ground gasoline tanks will be 200,000 gallons per year. The Biogas product meets the definition of gasoline, so all of the new tanks are exempt from the provisions of Article 4-37, providing that Stage I servicing is used at all times. Also, gasoline service station tanks are exempt from Kb. Due to increased gasoline throughputs, the VOC emissions that result from the gasoline throughputs will have to be recalculated with the results appearing in both condition #'s 35 and 37.

In addition, the Navy has received permission from the EPA (see letter in file dated 9/21/04) to revert to monthly recordkeeping for fuel in the NSPS Dc boilers. This change is reflected in the recordkeeping condition # 49b. Based on the fact that this amendment will have to be a significant one, and considering all of the foregoing page amendments, it was decided to incorporate all of the page amendments since the previous complete amendment to this SOP. Therefore, the page amendments dated September 19, 2002, July 7, 2003 and January 30, 2004 will all be incorporated into this amendment for the new gasoline tanks. Changes can be seen in Condition #2 for Storage Tanks; There are now three above ground storage tanks for gasoline with total capacity of 10,800 gallons (Ref. No. GAS-AST-001). Also in Condition #2 for the Storage Tanks; the total capacity for the underground gasoline tanks is now 27,000 gallons

(Ref. No. GAS-UST-001). And for Condition #2 Storage Tanks; there are eight aboveground distillate tanks over 1000 gallons (a BioDiesel tank was also added to the inventory). Total capacity here will be limited to 33,000 gallons. The emissions from the BioDiesel tanks are insignificant (Ref. No. DO-AST-001).

Condition #7 had to be updated to reflect the new UST and AST tanks for gasoline with respect to emission controls. Condition # 18 was updated to indicate the new gasoline throughput for the new UST's. Condition # 22 was corrected to indicate the new number of distillate aboveground storage tanks at the facility; now 40 tanks.

Final Recommendation: Recommend Approval.

Environmental

Engineer's

Signature:

_____.

Air

Permit

Manager's

Signature:

_____.